

VILLAGE OF DOWNERS GROVE
REPORT FOR THE VILLAGE COUNCIL MEETING
JANUARY 8, 2013 AGENDA

SUBJECT:	TYPE:	SUBMITTED BY:
Main and Grant Traffic Signal Modernization (CIP Project TR-017) Joint Agreement with IDOT	✓ Resolution Ordinance Motion Discussion Only	Nan Newlon, P.E. Director of Public Works

SYNOPSIS

A resolution has been prepared approving an agreement between the Illinois Department of Transportation (IDOT) and the Village for the traffic signal replacement and modernization at the intersection of Main Street and Grant Street.

STRATEGIC PLAN ALIGNMENT

The goals for 2011 to 2018 identified *Top Quality Infrastructure*.

FISCAL IMPACT

The FY13 budget includes \$112,600 in the Capital Projects Fund for the Village's share of the project cost. The Village's portion is 30% of the project cost, estimated to be \$78,248.10.

RECOMMENDATION

Approval on the January 8, 2013 consent agenda.

BACKGROUND

The Village was awarded a grant under the Surface Transportation Program (STP) through the DuPage Mayor's and Manager's Conference (DMMC) to replace and modernize the traffic signal at the intersection of Main and Grant Streets, adjacent to Downers Grove North High School. This agreement will facilitate the bidding process, which will be completed by IDOT.

The traffic signal is in need of replacement due to its age. The new traffic signal will include many features which will enhance pedestrian and motorist safety including:

- New generation video detection cameras;
- Pedestrian signals with countdown features;
- A battery back-up system to provide an uninterrupted power source ;
- Opticom detection system to adjust signal timing for emergency vehicles;
- Interconnected (fiber optic) connection with the signals at Prairie Avenue; and
- Improved intersection lighting.

Grant funds were received for this project through the Surface Transportation Program, which is administered by DMMC and IDOT. The attached agreement sets the funding obligations for each party. The State of Illinois is contracting the work and the Village will pay the State 30% of the cost of the project. The preliminary engineer's estimate for the total cost of the project is \$260,827.

ATTACHMENTS

Resolution

IDOT form BLR-05310 (Local Agency Agreement)

State of Illinois Engineer's Estimate

RESOLUTION NO. _____

**A RESOLUTION AUTHORIZING EXECUTION OF AN
INTERGOVERNMENTAL AGREEMENT BETWEEN
THE VILLAGE OF DOWNERS GROVE AND THE
ILLINOIS DEPARTMENT OF TRANSPORTATION
FOR THE TRAFFIC SIGNAL REPLACEMENT AT MAIN AND GRANT STREETS**

BE IT RESOLVED by the Village Council of the Village of Downers Grove, DuPage County, Illinois as follows:

Section 1. That the form and substance of a certain Agreement (the “Agreement”), between the Village of Downers Grove (the “Local Agency” or “LA”) and the Illinois Department of Transportation (the “State”) for the traffic signal replacement at Main and Grant Streets (Project M9003(902)) as set forth in the form of the Agreement submitted to this meeting with the recommendation of the Village Manager, is hereby approved.

Section 2. That the Mayor and Village Clerk are hereby respectively authorized and directed for and on behalf of the Village to execute, attest, seal and deliver the Agreement, substantially in the form approved in the foregoing paragraph of this Resolution, together with such changes as the Village Manager shall deem necessary.

Section 3. That the proper officials, agents and employees of the Village are hereby authorized and directed to take such further action as they may deem necessary or appropriate to perform all obligations and commitments of the Village in accordance with the provisions of the Agreement.

Section 4. That all resolutions or parts of resolutions in conflict with the provisions of this Resolution are hereby repealed.

Section 5. That this Resolution shall be in full force and effect from and after its passage as provided by law.

Mayor

Passed:

Attest: _____
Village Clerk



Illinois Department of Transportation

Local Agency Agreement for Federal Participation

Local Agency Village of Downers Grove	State Contract X	Day Labor	Local Contract	RR Force Account
Section 11-00103-00-TL	Fund Type STU	ITEP Number		

Construction		Engineering		Right-of-Way	
Job Number	Project Number	Job Number	Project Number	Job Number	Project Number
C-91-171-12	M-9003(902)				

This Agreement is made and entered into between the above local agency hereinafter referred to as the "LA" and the state of Illinois, acting by and through its Department of Transportation, hereinafter referred to as "STATE". The STATE and LA jointly propose to improve the designated location as described below. The improvement shall be constructed in accordance with plans approved by the STATE and the STATE's policies and procedures approved and/or required by the Federal Highway Administration hereinafter referred to as "FHWA".

Location

Local Name Main Street Route FAU 2615 Length 0.44 mile
Termini at Grant Street

Current Jurisdiction LA Existing Structure No N/A

Project Description

Traffic Signal Modernization

Division of Cost

Type of Work	STU	%	STATE	%	LA	%	Total
Participating Construction	285,000	(*)		()	122,145	(BAL)	407,145
Non-Participating Construction		()		()		()	
Preliminary Engineering		()		()		()	
Construction Engineering		()		()		()	
Right of Way		()		()		()	
Railroads		()		()		()	
Utilities		()		()		()	
Materials							
TOTAL	\$ 285,000		\$		\$ 122,145		\$ 407,145

*Maximum FHWA (STU) Participation 70% not to exceed \$285,000

NOTE: The costs shown in the Division of Cost table are approximate and subject to change. The final LA share is dependent on the final Federal and State participation. The actual costs will be used in the final division of cost for billing and reimbursement.

If funding is not a percentage of the total, place an asterisk in the space provided for the percentage and explain above.

The Federal share of construction engineering may not exceed 15% of the Federal share of the final construction cost.

Local Agency Appropriation

By execution of this Agreement, the LA is indicating sufficient funds have been set aside to cover the local share of the project cost and additional funds will be appropriated, if required, to cover the LA's total cost.

Method of Financing (State Contract Work)

METHOD A---Lump Sum (80% of LA Obligation) _____

METHOD B--- _____ Monthly Payments of _____

METHOD C---LA's Share Balance divided by estimated total cost multiplied by actual progress payment.

(See page two for details of the above methods and the financing of Day Labor and Local Contracts)

Agreement Provisions

THE LA AGREES:

- (1) To acquire in its name, or in the name of the state if on the state highway system, all right-of-way necessary for this project in accordance with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, and established state policies and procedures. Prior to advertising for bids, the **LA** shall certify to the **STATE** that all requirements of Titles II and III of said Uniform Act have been satisfied. The disposition of encroachments, if any, will be cooperatively determined by representatives of the **LA**, and **STATE** and the **FHWA**, if required.
- (2) To provide for all utility adjustments, and to regulate the use of the right-of-way of this improvement by utilities, public and private, in accordance with the current Utility Accommodation Policy for Local Agency Highway and Street Systems.
- (3) To provide for surveys and the preparation of plans for the proposed improvement and engineering supervision during construction of the proposed improvement.
- (4) To retain jurisdiction of the completed improvement unless specified otherwise by addendum (addendum should be accompanied by a location map). If the improvement location is currently under road district jurisdiction, an addendum is required.
- (5) To maintain or cause to be maintained, in a manner satisfactory to the **STATE** and **FHWA**, the completed improvement, or that portion of the completed improvement within its jurisdiction as established by addendum referred to in item 4 above.
- (6) To comply with all applicable Executive Orders and Federal Highway Acts pursuant to the Equal Employment Opportunity and Nondiscrimination Regulations required by the U.S. Department of Transportation.
- (7) To maintain, for a minimum of 3 years after the completion of the contract, adequate books, records and supporting documents to verify the amounts, recipients and uses of all disbursements of funds passing in conjunction with the contract; the contract and all books, records and supporting documents related to the contract shall be available for review and audit by the Auditor General and the department; and the **LA** agrees to cooperate fully with any audit conducted by the Auditor General and the department; and to provide full access to all relevant materials. Failure to maintain the books, records and supporting documents required by this section shall establish a presumption in favor of the **STATE** for the recovery of any funds paid by the **STATE** under the contract for which adequate books, records and supporting documentation are not available to support their purported disbursement.
- (8) To provide if required, for the improvement of any railroad-highway grade crossing and rail crossing protection within the limits of the proposed improvement.
- (9) To comply with Federal requirements or possibly lose (partial or total) Federal participation as determined by the **FHWA**.
- (10) (State Contracts Only) That the method of payment designated on page one will be as follows:
 - Method A - Lump Sum Payment. Upon award of the contract for this improvement, the **LA** will pay to the **STATE**, in lump sum, an amount equal to 80% of the **LA**'s estimated obligation incurred under this Agreement, and will pay to the **STATE** the remainder of the **LA**'s obligation (including any nonparticipating costs) in a lump sum, upon completion of the project based upon final costs.
 - Method B - Monthly Payments. Upon award of the contract for this improvement, the **LA** will pay to the **STATE**, a specified amount each month for an estimated period of months, or until 80% of the **LA**'s estimated obligation under the provisions of the Agreement has been paid, and will pay to the **STATE** the remainder of the **LA**'s obligation (including any nonparticipating costs) in a lump sum, upon completion of the project based upon final costs.
 - Method C - Progress Payments. Upon receipt of the contractor's first and subsequent progressive bills for this improvement, the **LA** will pay to the **STATE**, an amount equal to the **LA**'s share of the construction cost divided by the estimated total cost, multiplied by the actual payment (appropriately adjusted for nonparticipating costs) made to the contractor until the entire obligation incurred under this Agreement has been paid.
- (11) (Day Labor or Local Contracts) To provide or cause to be provided all of the initial funding, equipment, labor, material and services necessary to construct the complete project.
- (12) (Preliminary Engineering) In the event that right-of-way acquisition for, or actual construction of the project for which this preliminary engineering is undertaken with Federal participation is not started by the close of the tenth fiscal year following the fiscal year in which this agreement is executed, the **LA** will repay the **STATE** any Federal funds received under the terms of this Agreement.
- (13) (Right-of-Way Acquisition) In the event that the actual construction of the project on this right-of-way is not undertaken by the close of the twentieth fiscal year following the fiscal year in which this Agreement is executed, the **LA** will repay the **STATE** any Federal Funds received under the terms of this Agreement.

- (14) (Railroad Related Work Only) The estimates and general layout plans for at-grade crossing improvements should be forwarded to the Rail Safety and Project Engineer, Room 204, Illinois Department of Transportation, 2300 South Dirksen Parkway, Springfield, Illinois, 62764. Approval of the estimates and general layout plans should be obtained prior to the commencement of railroad related work. All railroad related work is also subject to approval by the Illinois Commerce Commission (ICC). Final inspection for railroad related work should be coordinated through appropriate IDOT District Bureau of Local Roads and Streets office.
- Plans and preemption times for signal related work that will be interconnected with traffic signals shall be submitted to the ICC for review and approval prior to the commencement of work. Signal related work involving interconnects with state maintained traffic signals should also be coordinated with the IDOT's District Bureau of Operations.
- The **LA** is responsible for the payment of the railroad related expenses in accordance with the **LA**/railroad agreement prior to requesting reimbursement from IDOT. Requests for reimbursement should be sent to the appropriate IDOT District Bureau of Local Roads and Streets office.
- Engineer's Payment Estimates in accordance with the Division of Cost on page one.
- (15) And certifies to the best of its knowledge and belief its officials:
- are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal department or agency;
 - have not within a three-year period preceding this Agreement been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements receiving stolen property;
 - are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, local) with commission of any of the offenses enumerated in item (b) of this certification; and
 - have not within a three-year period preceding the Agreement had one or more public transactions (Federal, State, local) terminated for cause or default.
- (16) To include the certifications, listed in item 15 above and all other certifications required by State statutes, in every contract, including procurement of materials and leases of equipment.
- (17) (State Contracts) That execution of this agreement constitutes the **LA**'s concurrence in the award of the construction contract to the responsible low bidder as determined by the **STATE**.
- (18) That for agreements exceeding \$100,000 in federal funds, execution of this Agreement constitutes the **LA**'s certification that:
- No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or any employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan or cooperative agreement;
 - If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress, in connection with this Federal contract, grant, loan or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions;
 - The **LA** shall require that the language of this certification be included in the award documents for all subawards at all ties (including subcontracts, subgrants and contracts under grants, loans and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.
- (19) To regulate parking and traffic in accordance with the approved project report.
- (20) To regulate encroachments on public right-of-way in accordance with current Illinois Compiled Statutes.
- (21) To regulate the discharge of sanitary sewage into any storm water drainage system constructed with this improvement in accordance with current Illinois Compiled Statutes.
- (22) That the **LA** may invoice the **STATE** monthly for the **FHWA** and/or **STATE** share of the costs incurred for this phase of the improvement. The **LA** will submit supporting documentation with each request for reimbursement from the **STATE**. Supporting documentation is defined as verification of payment, certified time sheets, vendor invoices, vendor receipts, and other documentation supporting the requested reimbursement amount.
- (23) To complete this phase of the project within three years from the date this agreement is approved by the **STATE** if this portion of the project described in the Project Description does not exceed \$1,000,000 (five years if the project costs exceed \$1,000,000).
- (24) Upon completion of this phase of the improvement, the **LA** will submit to the **STATE** a complete and detailed final invoice with all applicable supporting supporting documentation of all incurred costs, less previous payments, no later than one year from the date of completion of this phase of the improvement. If a final invoice is not received within one year of completion of this phase of the improvement, the most recent invoice may be considered the final invoice and the obligation of the funds closed.

- (25) (Single Audit Requirements) That if the **LA** expends \$500,000 or more a year in federal financial assistance they shall have an audit made in accordance with the Office of Management and Budget (OMB) Circular No. A-133. **LA**'s that expend less than \$500,000 a year shall be exempt from compliance. A copy of the audit report must be submitted to the **STATE** with 30 days after the completion of the audit, but no later than one year after the end of the **LA**'s fiscal year. The CFDA number for all highway planning and construction activities is 20.205.
- (26) That the **LA** is required to register with the Central Contractor Registration (CCR), which is a web-enabled government-wide application that collects, validates, stores, and disseminates business information about the federal government's trading partners in support of the contract award and the electronic payment processes. If you do not have a CCR number, you must register at <https://www.bpn.gov/ccr>. If the **LA**, as a sub-recipient of a federal funding, receives an amount equal to or greater than \$25,000 (or which equals or exceeds that amount by addition of subsequent funds), this agreement is subject to the following award terms: <http://edocket.access.gpo.gov/2010/pdf/2010-22705.pdf> and <http://edocket.access.gpo.gov/2010/pdf/2010-22706.pdf>.

THE STATE AGREES:

- (1) To provide such guidance, assistance and supervision and to monitor and perform audits to the extent necessary to assure validity of the **LA**'s certification of compliance with Titles II and III requirements.
- (2) (State Contracts) To receive bids for the construction of the proposed improvement when the plans have been approved by the **STATE** (and **FHWA**, if required) and to award a contract for construction of the proposed improvement, after receipt of a satisfactory bid.
- (3) (Day Labor) To authorize the **LA** to proceed with the construction of the improvement when Agreed Unit Prices are approved and to reimburse the **LA** for that portion of the cost payable from Federal and/or State funds based on the Agreed Unit Prices and Engineer's Payment Estimates in accordance with the Division of Cost on page one.
- (4) (Local Contracts) That for agreements with Federal and/or State funds in engineering, right-of-way, utility work and/or construction work:
 - (a) To reimburse the **LA** for the Federal and/or State share on the basis of periodic billings, provided said billings contain sufficient cost information and show evidence of payment by the **LA**;
 - (b) To provide independent assurance sampling, to furnish off-site material inspection and testing at sources normally visited by **STATE** inspectors of steel, cement, aggregate, structural steel and other materials customarily tested by the **STATE**.

IT IS MUTUALLY AGREED:

- (1) Construction of the project will utilize domestic steel as required by Section 106.01 of the current edition of the Standard Specifications for Road and Bridge Construction.
- (2) That this Agreement and the covenants contained herein shall become null and void in the event that the **FHWA** does not approve the proposed improvement for Federal-aid participation or the contract covering the construction work contemplated herein is not awarded within three years of the date of execution of this Agreement.
- (3) This Agreement shall be binding upon the parties, their successors and assigns.
- (3) For contracts awarded by the **LA**, the **LA** shall not discriminate on the basis of race, color, national origin or sex in the award and performance of any USDOT – assisted contract or in the administration of its DBE program or the requirements of 49 CFR part 26. The **LA** shall take all necessary and reasonable steps under 49 CFR part 26 to ensure nondiscrimination in the award and administration of USDOT – assisted contracts. The **LA**'s DBE program, as required by 49 CFR part 26 and as approved by USDOT, is incorporated by reference in this Agreement. Upon notification to the recipient of its failure to carry out its approved program, the department may impose sanctions as provided for under part 26 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001 and/or the Program Fraud Civil Remedies Act of 1986 (31U.S.C. 3801 et seq.). In the absence of a USDOT – approved **LA** DBE Program or on State awarded contracts, this Agreement shall be administered under the provisions of the **STATE**'s USDOT approved Disadvantaged Business Enterprise Program.
- (4) In cases where the **STATE** is reimbursing the **LA**, obligations of the **STATE** shall cease immediately without penalty or further payment being required if, in any fiscal year, the Illinois General Assembly or applicable Federal Funding source fails to appropriate or otherwise make available funds for the work contemplated herein.
- (5) All projects for the construction of fixed works which are financed in whole or in part with funds provided by this Agreement and/or amendment shall be subject to the Prevailing Wage Act (820 ILCS 130/0.01 et seq.) unless the provisions of that Act exempt its application

ADDENDA

Additional information and/or stipulations are hereby attached and identified below as being a part of this Agreement.

Number 1 Location Map

(Insert addendum numbers and titles as applicable)

The LA further agrees, as a condition of payment, that it accepts and will comply with the applicable provisions set forth in this Agreement and all exhibits indicated above.

APPROVED

Local Agency

Martin Tully

Name of Official (Print or Type Name)

Mayor

Title (County Board Chairperson/Mayor/Village President/etc.)

(Signature)

Date

The above signature certifies the agency's TIN number is
36-6005857 conducting business as a Governmental
Entity.

DUNS Number 030899512

APPROVED

State of Illinois
Department of Transportation

Ann L. Schneider, Secretary of Transportation

Date

By:

(Delegate's Signature)

(Delegate's Name - Printed)

William R. Frey, Interim Director of Highways/Chief Engineer

Date

Ellen J. Schanzle-Haskins, Chief Counsel

Date

Matthew R. Hughes, Director of Finance and Administration

Date

NOTE: If signature is by an APPOINTED official, a resolution authorizing said appointed official to execute this agreement is required.



(Construction) Estimate of Cost

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL COST	EEO % Breakdown
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5"	SQ FT	717	7.00	\$5,019.00	1.92%
42400800	DETECTABLE WARNINGS	SQ FT	70	25.00	\$1,750.00	0.67%
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	87	6.00	\$522.00	0.20%
44000600	SIDEWALK REMOVAL	SQ FT	684	2.00	\$1,368.00	0.52%
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	87	22.00	\$1,914.00	0.73%
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	2,000.00	\$2,000.00	0.77%
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	700.00	\$700.00	0.27%
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	500.00	\$500.00	0.19%
72000100	SIGN PANEL - TYPE 1	SQ FT	19.5	30.00	\$585.00	0.22%
78000600	THERMOPLASTIC PAVEMENT MARKING-LINE 12"	FOOT	755	2.00	\$1,510.00	0.58%
78000650	THERMOPLASTIC PAVEMENT MARKING-LINE 24"	FOOT	162	4.00	\$648.00	0.25%
80500020	SERVICE INSTALLATION, POLE MOUNTED	EACH	1	1,500.00	\$1,500.00	0.58%
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	2359	17.00	\$40,103.00	15.38%
81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	86	27.00	\$2,322.00	0.89%
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	135	35.00	\$4,725.00	1.81%
81400100	HANDHOLE	EACH	6	1,100.00	\$6,600.00	2.53%
81400300	DOUBLE HANDHOLE	EACH	1	2,200.00	\$2,200.00	0.84%
81702450	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 10	FOOT	235	6.00	\$1,410.00	0.54%
82103250	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 250 WATT	EACH	2	500.00	\$1,000.00	0.38%
84100110	REMOVAL OF TEMPORARY LIGHTING UNIT	EACH	1	400.00	\$400.00	0.15%
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	1,000.00	\$1,000.00	0.38%
85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1	21,000.00	\$21,000.00	8.05%
86200200	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1	9,000.00	\$9,000.00	3.45%
86400100	TRANSCEIVER - FIBER OPTIC	EACH	1	3,500.00	\$3,500.00	1.34%
87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	2185	1.15	\$2,512.75	0.96%
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	375	2.00	\$750.00	0.29%
X8710024	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	2185	3.50	\$7,647.50	2.93%
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	385	1.10	\$423.50	0.16%
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	735	1.30	\$955.50	0.37%
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1215	1.50	\$1,822.50	0.70%
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1430	1.50	\$2,145.00	0.82%
X8730250	ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED, SHIELDED	FOOT	195	1.15	\$224.25	0.09%



(Construction) Estimate of Cost

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL COST	EEO % Breakdown
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	150	6.00	\$900.00	0.35%
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1	1,000.00	\$1,000.00	0.38%
87502520	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1	1,200.00	\$1,200.00	0.46%
87702830	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 20 FT.	EACH	2	7,000.00	\$14,000.00	5.37%
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	8	135.00	\$1,080.00	0.41%
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4	500.00	\$2,000.00	0.77%
87800415	CONCRETE FOUNDATION, TYPE E, 36-INCH DIAMETER	FOOT	20	250.00	\$5,000.00	1.92%
87900200	DRILL EXISTING HANDHOLE	EACH	1	275.00	\$275.00	0.11%
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4	1,000.00	\$4,000.00	1.53%
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1	950.00	\$950.00	0.36%
88030210	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1	1,800.00	\$1,800.00	0.69%
88030310	SIGNAL HEAD, LED, 3-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1	2,600.00	\$2,600.00	1.00%
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2	800.00	\$1,600.00	0.61%
88102747	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2	1,500.00	\$3,000.00	1.15%
88200100	TRAFFIC SIGNAL BACKPLATE	EACH	4	115.00	\$460.00	0.18%
88500100	INDUCTIVE LOOP DETECTOR	EACH	5	175.00	\$875.00	0.34%
88600100	DETECTOR LOOP, TYPE I	FOOT	245	16.00	\$3,920.00	1.50%
88700200	LIGHT DETECTOR	EACH	2	1,200.00	\$2,400.00	0.92%
88700300	LIGHT DETECTOR AMPLIFIER	EACH	1	1,700.00	\$1,700.00	0.65%
88800100	PEDESTRIAN PUSH-BUTTON	EACH	4	340.00	\$1,360.00	0.52%
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1	45,000.00	\$45,000.00	17.25%
89502200	MODIFY EXISTING CONTROLLER	EACH	1	2,000.00	\$2,000.00	0.77%
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1	5,000.00	\$5,000.00	1.92%
89502380	REMOVE EXISTING HANDHOLE	EACH	3	300.00	\$900.00	0.35%
89502382	REMOVE EXISTING DOUBLE HANDHOLE	EACH	1	350.00	\$350.00	0.13%
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	4	300.00	\$1,200.00	0.46%
Z0033046	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM-LEVEL II	EACH	1	3,500.00	\$3,500.00	1.34%
Z0033072	VIDEO VEHICLE DETECTION SYSTEM	EACH	1	25,000.00	\$25,000.00	9.58%

Total Estimated Cost: **\$260,827.00** 100.00%

Made by: Jeff Meindl Date: 08/21/12

Checked by: LMM